Annales de la Fondation Louis de Broglie 2004 vol.29 NSPEC. 3, pages 1177-1186

The influence of "strange" radiation on Mössbauer spectrum of Fe 57 in metallic foils

Ivoilov N., Urutskoev L.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

Mössbauer investigations of thin foils of metallic iron exposed to "strange" radiation generated by electric explosion of thin wires in liquid are presented. The method of conversion electron spectroscopy has been used to determine the nature of detected particles admittedly named magnetic monopoles. The experiment has shown that the number of monopoles absorbed by the sample is enough to detect its influence on the Mössbauer spectrum. Determined changes of the effective magnetic field on iron nuclei essentially exceed of measurement inaccuracies. The following has been determined: a) the effect value depends on time from irradiation moment; b) the change of effective magnetic filed on iron nuclei correlates with the direction of the external magnetic field applied to the sample during the irradiation, that is the magnetic field separates N- and S-monopoles.